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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------|-----------------------------------|-----------------------|---------------------|------------------|
| 10/710,998 | 08/16/2004 | Anand Shridhar SAWANT | TI-36864 | 4997 |
| | 7590 10/22/200 UMENTS INCORPOI | EXAMINER | | |
| P O BOX 6554 DALLAS, TX 7 | | | MORRISON, JAY A | |
| DALLAS, IA | 13203 | | ART UNIT | PAPER NUMBER |
| | | | 2168 | |
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| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 10/22/2009 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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| | Applica | ation No. | Applicant(s) | |
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| Office Action Summary | | ,998 | SAWANT ET AL. | |
| | | ner | Art Unit | |
| | JAY A. | MORRISON | 2168 | |
| The MAILING DATE of this com Period for Reply | munication appears on | the cover sheet with | the correspondence ac | ddress |
| A SHORTENED STATUTORY PERIC WHICHEVER IS LONGER, FROM TH - Extensions of time may be available under the provafter SIX (6) MONTHS from the mailing date of this - If NO period for reply is specified above, the maxim - Failure to reply within the set or extended period for Any reply received by the Office later than three more amed patent term adjustment. See 37 CFR 1.704 | E MAILING DATE OF isions of 37 CFR 1.136(a). In no communication. um statutory period will apply and reply will, by statute, cause the anths after the mailing date of this | THIS COMMUNICA event, however, may a repl d will expire SIX (6) MONTH application to become ABAN | ATION. y be timely filed IS from the mailing date of this of IDONED (35 U.S.C. § 133). | • |
| Status | | | | |
| Responsive to communication(s This action is FINAL. Since this application is in condiction closed in accordance with the p | 2b)∏ This action is tion for allowance exce | pt for formal matter | • | e merits is |
| Disposition of Claims | | | | |
| 4) ☐ Claim(s) 29-52 is/are pending in 4a) Of the above claim(s) 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 29-52 is/are rejected. 7) ☐ Claim(s) is/are objected to solve the complex of the complex | is/are withdrawn from | | | |
| 9) The specification is objected to be 10) The drawing(s) filed on is Applicant may not request that any Replacement drawing sheet(s) including The oath or declaration is object | yare: a) accepted or objection to the drawing(solding the correction is req | s) be held in abeyance uired if the drawing(s) | e. See 37 CFR 1.85(a). is objected to. See 37 C | , , |
| Priority under 35 U.S.C. § 119 | | | | |
| 12) Acknowledgment is made of a cl a) All b) Some * c) None of 1. Certified copies of the price 2. Certified copies of the price 3. Copies of the certified copies of the application from the Interest * See the attached detailed Office a | of: ority documents have b ority documents have b ories of the priority docu national Bureau (PCT F | een received. een received in App ments have been re Rule 17.2(a)). | olication No eceived in this National | Stage |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Revi 3) Information Disclosure Statement(s) (PTO/SB Paper No(s)/Mail Date | | Paper No(s)/N | rmal Patent Application | |

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DETAILED ACTION

Remarks

1. Claims 29-52 are pending.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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3. Claims 29-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harmer (Patent Number 6,567,887) in view of Suzuki (Patent Number 6,604,170).

As per claim 29, Harmer teaches

A method for accessing a file in a file system in a protected area comprised in secondary storage of a digital processing system comprising a secure random access memory (RAM), the method comprising: (see abstract and background)

opening the file using a file open operation comprised in a file metadata processing module loaded in a shared execution portion of the secure RAM, wherein and stores a cluster identifier for each cluster in the sequence in a buffer comprised in a shared data portion of the secure RAM; (clusters of files stored in FAT table which is cached in RAM, column 6, lines 18-22 and 25-35)

accessing the file using a file access operation comprised in a file data processing module loaded in the shared execution portion, wherein the data processing module overlays at least a portion of the metadata processing module, (caching mechanism for FAT table, column 6, lines 6-11, where a cache inherently does not have the capacity to hold the entirety of a structure such as a hard drive) and wherein the file

access operation accesses a portion of data in the file using at least one cluster identifier stored in the buffer wherein the cluster identifiers are stored in the buffer such that each cluster identifier is locatable by an index computed using a cluster size and a start offset of data in the file. (query caching mechanism to determine information, column 6, lines 14-18)

<u>Harmer</u> does not explicitly indicate "the file open operation traverses a file access table (FAT) of the file system to determine a sequence of clusters allocated to the file".

However, <u>Suzuki</u> discloses "the file open operation traverses a file access table (FAT) of the file system to determine a sequence of clusters allocated to the file" (clusters of files retrieved and stored, column 9, lines 15-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine <u>Harmer</u> and <u>Suzuki</u> because using the steps of "the file open operation traverses a file access table (FAT) of the file system to determine a sequence of clusters allocated to the file" would have given those skilled in the art the tools to improve the invention by allowing faster access to files by storing important structures in faster memory. This gives the user the advantage of more efficient use of time and resources.

As per claim 30, <u>Harmer</u> teaches

the file access operation comprises: computing, based on a start index of the portion of data and the cluster size, an index into the buffer of a location of a cluster identifier of a cluster comprising a start of the data; using the index to retrieve the

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cluster identifier from the buffer; computing an offset within the cluster of the start of the data; and issuing commands to access the data in the cluster starting at the offset.

(column 7, liens 15-25)

As per claim 31, <u>Harmer</u> teaches

the cluster identifiers are stored sequentially in the buffer in cluster allocation order. (column 7, lines 34-37)

As per claim 32, Harmer teaches

the sequence of clusters consists of all clusters allocated to the file. (column 7, lines 32-35)

As per claim 33, Harmer teaches

opening the file and accessing the file are preformed in a secure mode of the digital processing system. (column 7, lines 49-53)

As per claim 34, <u>Harmer</u> teaches

each file in the file system has a same number of clusters and the buffer is of a size to store a cluster identifier for all clusters in a file. (column 7, lines 30-34)

As per claim 35, Harmer teaches

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the buffer is overwritten each time a file in the file system is opened. (column 7, lines 28-30)

As per claim 36, Harmer teaches

the secondary storage is a secure digital card. (column 8, lines 28-32)

As per claims 37-44 and 45-52,

These claims are rejected on grounds corresponding to the arguments given above for rejected claims 39-46, respectively, and are similarly rejected.

Response to Arguments

4. Applicant's arguments filed 7/20/2009 have been fully considered but they are not persuasive. Applicant argues that <u>Suzuki</u> does not discloses the newly added claims, however it is respectfully submitted that <u>Suzuki</u> teaches a method for advancing through FAT chain information until the file desired comes to an end (column 9, lines 15-30). The newly added <u>Harmer</u> reference teaches caching elements of a file system in RAM, such as the FAT tables (column 6, lines 1-11). When combined, the claimed caching of the chain of clusters from a FAT would have been obvious to one of skill in the art, since following the cluster chain in Suzuki and the caching of the FAT elements in Harmer would have led a person of skill in the art to produce the claimed invention.

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Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record, listed on form PTO-892, and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-7112. The examiner can normally be reached on M-F 8-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tim T. Vo/ Supervisory Patent Examiner, Art Unit 2168

Jay Morrison TC2100 Tim Vo TC2100